

PERMIT APPLICATION NUMBER: NRS#04.174

APPLICANT: Boyle Investment Company
5110 Maryland Way
Brentwood, Tennessee 37027
(615) 370-5120

LOCATION: The proposed project site is known as the Berry Farm Property and is situated adjacent to Interstate 65 and Goose Creek Bypass, southeast of Franklin. Portions Goose Creek and Fivemile Creek are located within the property boundaries. However, this project pertains solely to a portion of Goose Creek that is located on the property. Williamson County, Tennessee.

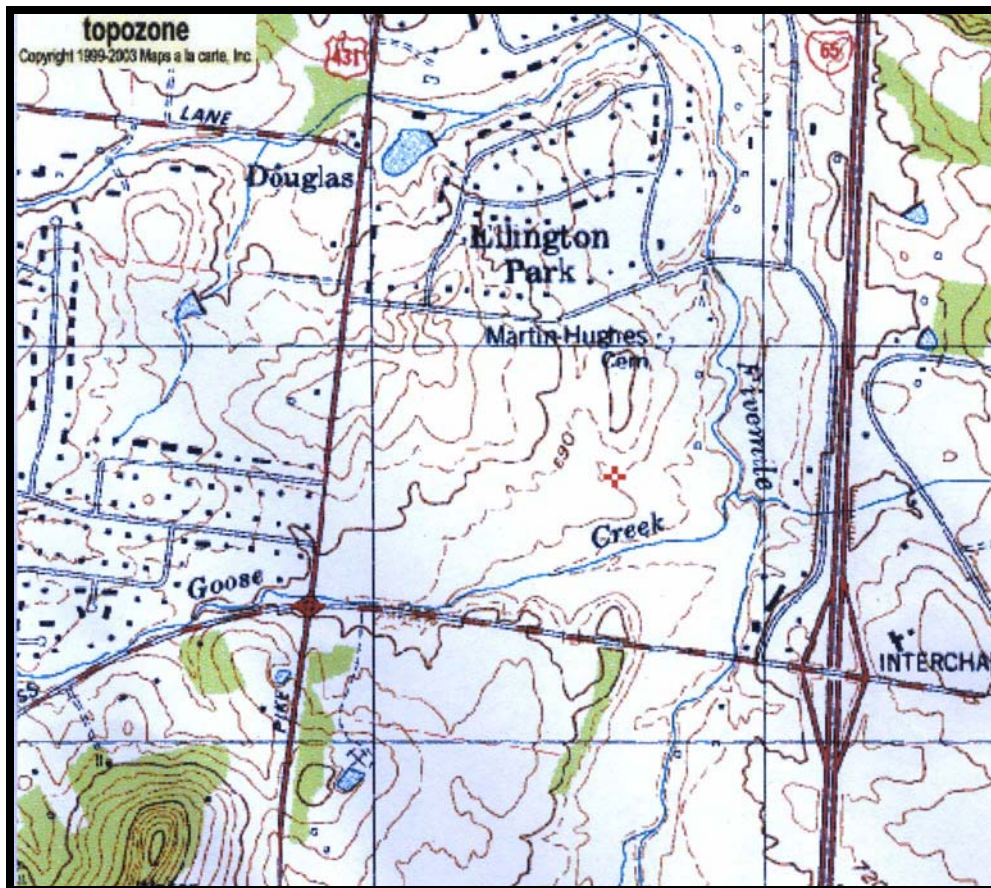
WATERSHED DESCRIPTION: Goose Creek is located within the Harpeth River Watershed. The immediate area of the project has been used primarily for agricultural purposes. The stream channel averages approximately 20 feet in width at the Ordinary High Water Mark (OHWM) along the reach proposed for relocation. Stream banks along the proposed project reach are moderate-to-steep in profile and in many locations are undercut or have slumped into the stream channel. Heavy and frequent use by cattle is apparent along the entire length of Goose Creek within the Berry Farm boundaries. Goose Creek flows over exposed limestone bedrock of the Hermitage formation (upstream) and the Carters formation downstream. The proposed relocation reach extends across the contact between these formations and includes exposures of both. Along the upper portions of the reach, the channel bottom consists of primarily of large, flat limestone slabs with minor to moderate occurrences of chert gravel, sand, and silt. Minor deposits of organic silt and clay also are present under quiet water. Downstream portions of the relocation reach also underlain by bedrock, but exhibit more frequent occurrences and thickness of soft sediments (sand, silt and clay). Slumped soil materials from eroding and unstable banks are commonly present along the length of the proposed project area. The riparian margin along Goose Creek within the Berry Farm property is not well established and as a consequence of agricultural activities, predominately comprises non-native species. A woody overstory that exists intermittently along some segments of the stream consist of such species as oaks, hackberry, osage orange, privet and Japanese Honey suckle.

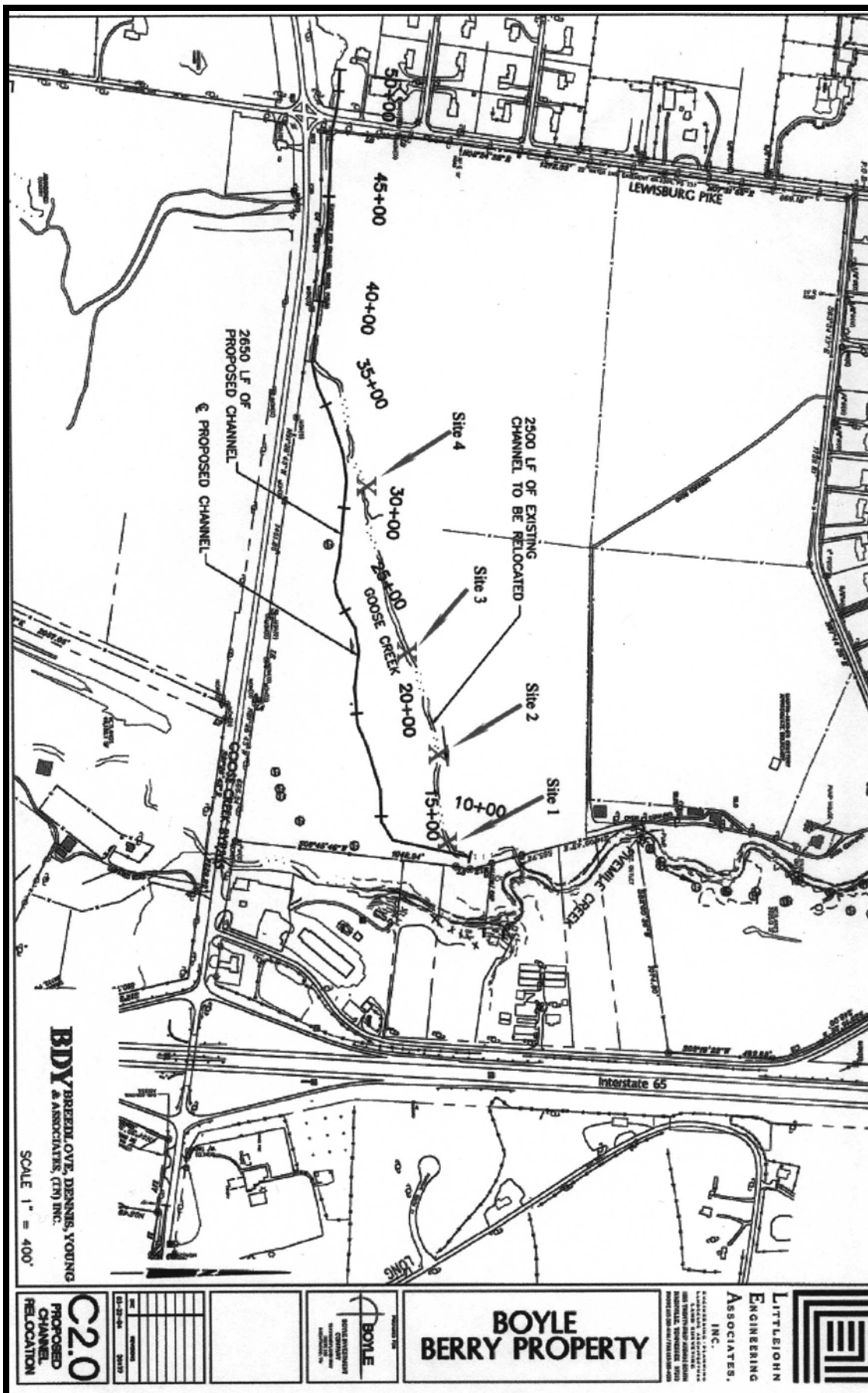
DESCRIPTION: The applicant proposes to place fill material along approximately 2,500 feet of the existing Goose Creek channel. A new channel will be constructed to receive diverted flow prior to placement of the fill. A length of approximately 2,650 feet of constructed is proposed as mitigation and replacement for filling the existing stream that will be disturbed by the proposed project. The relocated channel will be constructed approximately 50 to 250 feet to the south of the current channel and will conform generally to the sinuosity and undisturbed cross-sectional geometry of the existing channel.

Stream hydrology and base flow will be maintained by directing the existing stream flow into the constructed channel. Constructed channel banks will be appropriately stabilized to maintain the channel course during periods of high flow. Replacement of eroding and undercut banks on the existing stream channel with stabilized bank conditions on the replacement stream will improve the aquatic habitat in both the replacement stream and the portions of Fivemile Creek directly below its confluence with Goose Creek. Trees and shrubs indigenous to Tennessee will be planted along the riparian margins of the constructed channel. Plantings will extend to a minimum of 10 feet from the channel bank on both sides of the channel and will include a variety of 2-inch caliper trees planted on approximately 20-foot centers and a variety of native shrubs and grasses sufficient to create an effective riparian zone.

PERMIT COORDINATOR: Dorsey Horne, STATE OF TENNESSEE, Department of Environment and Conservation, Division of Water Pollution Control, 7th Floor, L & C Annex, 401 Church Street, Nashville, Tennessee 37243-1534

USGS QUAD: BETHESDA, TENNESSEE 63-SE





BDY BREED, OVE, DENNIS, YOUNG
 & ASSOCIATES, (TN) INC.
 SCALE 1" = 400'

C2.0
 PROPOSED
 CHANNEL
 RELOCATION

NO.	DATE	BY	CHKD.
1	01-20-04	BDY	



**BOYLE
 BERRY PROPERTY**

**BOYLE
 BERRY PROPERTY**

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